

Claims

What is claimed is:

1 1. A method for providing conference communications, comprising:
2 receiving at a dispatch server a join conference request from a client,
3 wherein the join conference request identifies a conference requested by the client; and
4 transmitting to the client an identified media server configured to host the
5 conference after selecting the identified media server from a plurality of media servers
6 using data pertaining to available capacity on the plurality of media servers.

1 2. The method of claim 1, further comprising:
2 accepting at the dispatch server a connect request from the client prior to
3 receiving the join conference request; and
4 transmitting a connect acknowledgment to the client, wherein the connect
5 acknowledgment facilitates communications between the client and the dispatch server.

1 3. The method of claim 2, further comprising:
2 authenticating the client prior to transmitting the connect acknowledgment
3 to the client.

1 4. The method of claim 1, further comprising:
2 receiving at the dispatch server a second join conference request from a
3 second client, wherein the second join conference request identifies a specified
4 conference requested by the second client;
5 examining a conference data repository to identify a selected media server
6 assigned to host the specified conference; and

transmitting an identity of the selected media server to the second client.

5. The method of claim 1, further comprising:

receiving an indication from the identified media server that the client has joined the conference on the identified media server; and
updating capacity data for the identified media server to reflect the indication.

6. The method of claim 1, further comprising:

receiving an indication from the identified media server that the client has left the conference on the identified media server; and
updating capacity data for the identified media server to reflect the indication.

7. The method of claim 1, further comprising:

receiving an indication from the identified media server that all clients have left the conference on the identified media server; and
deleting data pertaining to the conference from a conference data repository.

8. The method of claim 1, further comprising:

receiving an indication from the identified media server that it can no longer support the conference;
identifying another media server of the plurality of media servers to host the conference; and
transmitting to the client an identity for the another media server configured to host the conference.

1 9. The method of claim 1, further comprising:
2 receiving in the identified media server a join conference request from the
3 client; and
4 sending the client a channel identity from the identified media server,
5 wherein the channel identity informs the client where the identified media server receives
6 communications data.

1 10. The method of claim 9, further comprising:
2 receiving a client channel identity in the identified media server, wherein
3 the client channel identity informs the identified media server where the client receives
4 communications data.

1 11. The method of claim 9, further comprising:
2 receiving in the identified media server a second join conference request
3 from a second client, wherein the second join conference request identifies a selected
4 conference requested by the second client;
5 receiving communications data from the client by the identified media
6 server; and
7 sending the received communications data from the identified media server
8 to the second client.

1 12. The method of claim 1, further comprising:
2 receiving by a dispatcher switch a first connect request from the client,
3 wherein the dispatcher switch has been configured to select the dispatch server from a
4 plurality of dispatch servers to receive the first connect request.

1 13. The method of claim 12 wherein the dispatcher switch is configured
2 to select a second dispatch server after receiving the first connect request, the method
3 further comprising:

4 receiving by the dispatcher switch a second connect request from a second
5 client;

6 directing the second connect request to the second dispatch server;

7 receiving by the second dispatch server a second join conference request
8 from the second client, wherein the second join conference request identifies a selected
9 conference requested by the second client; and

10 transmitting to the second client from the second dispatch server an identity
11 of the media server hosting the conference.

1 14. The method of claim 12, further comprising:

2 examining conference creation data to determine whether the dispatch
3 server and the second dispatch server have allowed a same conference to be created on
4 different media servers of a plurality of media servers.

1 15. A method for providing a caller with conference communications,
2 comprising:

3 receiving in a dispatch server a call from the caller over a telephony
4 network; and

5 identifying a selected media server of a plurality of media servers to service
6 the call, wherein the media servers of the plurality of media servers are configured to
7 provide conference communications.

1 16. The method of claim 15, further comprising:

2 sending a signal to the selected media server to initiate a communications

3 with the dispatch server;
4 receiving a communication by the dispatch server from the selected media
5 server; and
6 connecting the call with the communication by the dispatch server.

1 17. The method of claim 16, further comprising:
2 receiving at a second dispatch server a join conference request from a
3 client, wherein the join conference request identifies the conference associated with the
4 call;
5 examining a conference table to identify the selected media server; and
6 transmitting the identity of the selected media server to the client.

1 18. The method of claim 16, further comprising:
2 servicing the call at the selected media server.

1 19. A system for facilitating conference communications, comprising:
2 a plurality of media servers, each media server configured to provide
3 conference communications; and
4 at least one dispatch server configured to identify a selected media server of
5 the plurality of media servers having appropriate capacity for providing conference
6 communications.

1 20. The system of claim 19 wherein the at least one dispatch server is
2 configured to direct a client to the identified media server.

1 21. The system of claim 19 wherein the at least one dispatch server
2 identifies the selected media server as having a greatest available capacity among the
3 plurality of media servers.

1 22. The system of claim 21 wherein the at least one dispatch server
2 disregards media servers of the plurality of media servers that have been scheduled for
3 inactivity during a time period for conference communications for the client.

1 23. The system of claim 19 wherein the at least one dispatch server
2 identifies the selected media server on the basis of media type.

1 24. The system of claim 19, further comprising:
2 an authentication server configured to authenticate client communication
3 requests.

1 25. A dispatch server configured to facilitate conference
2 communications, comprising:

3 a client host service module configured to receive a join conference request
4 from a client over an electronic network, wherein the join conference request identifies a
5 conference requested by the client; and

6 a dispatch service module configured to select a selected media server from
7 a plurality of media servers to host the conference requested by the client using data
8 pertaining to available capacity on the plurality of media servers.

1 26. The dispatch server of claim 25 wherein the client host service
2 module is further configured to receive a connect request from the client over the
3 electronic network prior to receiving the join conference request and is also configured to
4 transmit a connect acknowledgment to the client.

1 27. The dispatch server of claim 25 wherein the dispatch service module
2 is further configured to examine a conference data repository for a second client that has

3 requested the conference and identify the media server assigned to host the conference,
4 wherein the client host service module is further configured to transmit an identity for the
5 selected media server to the second client.

1 28. The dispatch server of claim 25 wherein the dispatch service module
2 is further configured to receive an indication from the selected media server that the
3 client has joined the conference on the selected media server and is also configured to
4 update capacity data for the selected media server.

1 29. The dispatch server of claim 25 wherein the dispatch service module
2 is further configured to receive an indication from the selected media server that the
3 client has left the conference on the selected media server and is also configured to
4 update capacity data for the selected media server.

1 30. The dispatch server of claim 25 wherein the dispatch service module
2 is further configured to receive an indication from the selected media server that it can no
3 longer support the conference and is further configured to identify a second media server
4 of the plurality of media servers to host the conference, wherein the client host service
5 module is further configured to transmit to the client an identity for the second media
6 server configured to host the conference.

1 31. A media server configured to provide conference communications to
2 a client of a plurality of clients, wherein the client receives an address for the media
3 server from a dispatch server that selected the media server on the basis of available
4 capacity, comprising:

5 a client host service module configured to receive a join conference request
6 from the client over an electronic network, wherein the join conference request identifies
7 the conference requested by the client;

8 a connect service module configured to arrange conference transmissions
9 for conference participants; and
10 a mesh service module configured to transmit media data to conference
11 participants.

1 32. The media server of claim 31 wherein the client service module is
2 configured to receive a join conference request from a second client, wherein the join
3 conference request identifies a selected conference requested by the client, and wherein
4 the mesh service module is configured to receive conference data from the client and
5 transmit the received conference data to the second client.

6 33. The media server of claim 31, further comprising:
7 a dispatchee service module configured to send an indication to the
8 dispatch server that the client has joined the conference on the media server, wherein the
9 dispatch server updates capacity data for the media server to reflect the indication.

10 34. The media server of claim 31, further comprising:
11 a dispatchee service module configured to send an indication to the
1 dispatch server that the client has left the conference on the media server, wherein the
2 dispatch server updates capacity data for the media server to reflect the indication.

3 35. The media server of claim 31, further comprising:
4 a dispatchee service module configured to send an indication to the
5 dispatch server that all clients have left the conference on the media server.

6 36. The media server of claim 31, further comprising:
7 a dispatchee service module configured to send an indication to the
8 dispatch server that the media server can no longer support the conference.